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13 November 2001

Mr. Ron Murawski, SR-6J Work Assignment Manager U.S. Environmental Protection Agency 77 West Jackson Boulevard Chicago, Illinois 60604

U.S. EPA Contract No.:

68-W7-0026

Work Assignment No.:

103-RXBF-052F

Document Control No.:

RFW103-2A-AKCN

Re:

Submittal of Oversight Report, H.O.D. Landfill, Antioch, Illinois.

Dear Mr. Murawski:

Roy F. Weston, Inc. (WESTON<sub>®</sub>) is pleased to submit the oversight report for the oversight provided after 30 April 2001 at the H.O.D Landfill, Antioch, Illinois.

Should you have any questions or require additional information, please feel free to contact me at (847) 918-4051.

Very truly yours,

ROY F WESTON INC

Omprakash S. Patel.

Site Manager

OSP:ld

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### REMEDIAL ACTION OVERSIGHT H.O.D. LANDFILL ANTIOCH, ILLINOIS

**NOVEMBER 2001** 

Prepared for

U.S. Environmental Protection Agency 77 West Jackson Boulevard Chicago, Illinois 60604

This document was prepared in accordance with U.S. EPA Contract No. 68-W7-0026, WESTON Region V Response Action Contract (RAC) and contains confidential business information.

Document Control No. RFW103-2A-AKCN

### Remedial Construction Oversight H. O. D. Landfill, Antioch, Illinois

The Remedial Construction Managers for the construction at the H.O.D. landfill is RMT, Inc., (RMT) of Madison, Wisconsin. RMT is contracted to Waste Management, Inc. The subcontractors performing work at the site are Terra Environmental Construction, Carey-Gelden Electric, Boudry Control Panels, LFG&E, and Prizm Environmental Equipment (Prizm). The subcontractors are contracted to RMT. Joseph Corns of Environmental Design International (EDI), Inc., provided the oversight at the H.O.D. Landfill. EDI is a team subcontractor on the RAC to Roy F. Weston, Inc. (WESTON®). This report summarizes activities conducted after 30 April 2001. The copies of the photographs and field logs are provided as attachments.

### 4 May 2001

Representatives of RMT and A. W. Oakes (Oakes) were present on-site to perform work. Joe Corns of EDI was present to perform construction oversight.

Mr. Corns reviewed RMT's daily construction reports for 27 April 2001 through 3 May 2001. The construction reports indicated that Oakes graded roadway locations, placed geotextile fabric, and placed and compacted gravel on the roadways. RMT excavated around existing wells (nonremediation system wells) that need to be cut down in height to final grade. RMT also glued identification tags to the tops of the remediation system well vaults. Concrete epoxy grout was injected into cracks in the flare pad.

Oakes continued working on landfill roadways by grading, installing geotextile fabric, and placing gravel over the fabric.

Mr. Corns reviewed the leachate truck log and found that two loads were removed on 26 April 2001; three loads were removed on 27 April 2001; two loads were removed on 28 April 2001; four loads were removed on 30 April 2001; one load was removed on 1 May 2001; one load was removed on 2 May 2001; two loads were removed on 3 May 2001; and one load was removed on 4 May 2001.

At 9:10 A.M., the tank gage indicated that the leachate level was 2.6 feet, corresponding to 5468 gallons. At 1:35 P.M., the leachate level was at 3.4 feet, corresponding to 7937.54 gallons. The flow rate of leachate into the tank was calculated to be 9.32 gallons/minute, or 13,420 gallons/day.

#### 9 May 2001

Representatives of RMT and Oakes were present on-site to perform work. Joe Corns of EDI was present to perform construction oversight.

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Mr. Corns reviewed RMT's daily construction reports for 4 May 2001 through 7 May 2001. The construction reports indicated that Oakes placed topsoil along the north road and cut and filled the center crossroad. No work was conducted on 7 May 2001 and 8 May 2001 due to rain and muddy conditions.

Oakes worked on landfill roadways by grading, installing geotextile fabric, and placing gravel over the fabric. Oakes also scraped and graded soil cover on the east section of the landfill.

Mr. Corns reviewed the leachate truck log and found that one load was removed on 3 May 2001; one load was removed on 4 May 2001; one load was removed on 5 May 2001; three loads were removed on 7 May 2001; and one load was removed on 8 May 2001.

RMT personnel balanced the landfill gas flow rate at selected wells in order to optimize the methane concentration near 50%.

Also on this day, buildings on the property north of the borrow area were being demolished.

EDI had previously identified that the leachate outflow flow meter was erroneously giving readings when no leachate was being pumped from the tank to trucks. Kirk Sohlberg of RMT informed Mr. Corns that a solenoid switch will be fitted to the flow meter circuit to cut its power when leachate is not being pumped.

A fence contractor was present to repair damage to the silt fence that surrounds the landfill.

At 10:55 A.M., a leachate tanker truck arrived at the site. The leachate level in the tank was 5.8 feet corresponding to 16,063 gallons. The flow meter reading was 521,967 gallons. At 11:26 A.M., the truck driver stopped pumping leachate into the tanker truck. The final flow meter reading was 528,012 gallons, a difference of 6,045 gallons. The level gage for the landfill tank indicated a leachate level of 3.3 feet, or 7,618 gallons, for a difference of 8,445 gallons. Mr. Corns discussed this discrepancy with RMT personnel and found that the pressure transducer for the leachate level gage may not be sitting on the bottom of the tank and may not be appropriately calibrated.

### 16 May 2001

Representatives of RMT, Prizm, and Oakes were present on site to perform work. Joe Corns of EDI was present to perform construction oversight.

Prizm personnel performed repairs on malfunctioning leachate pumps at the wellheads. Prizm replaced a clamp at GW-25; discovered a defective air line quick connect at GWF-5 and made arrangements to return with a new quick connect; repaired a leaking fitting at MHE; repaired a loose fitting at GW-16; repaired a fitting at GW-23; repaired a clamp at CS-4; found the tubing too long at GW-29 and cut the tubing to raise the pump out of mud; and found the pump set too

high in GW-22. Prizm stated that they will bring additional tubing for GW-22 when they return to the site.

Mr. Corns reviewed RMT's available daily construction reports for 8 May 2001 through 10 May 2001. The construction reports indicated that no work was conducted on 8 May 2001. On 9 May 2001, Oakes put down gravel and graded on the north road; Diemer Plumbing and Excavating loaded debris from the demolition site; and Midland Fence repaired silt fencing. On 10 May 2001, Oakes worked on the north road; Diemer loaded debris from the demolition site; and Kohr's and Sons abandoned a septic tank at the property north of the borrow area (the demolition site).

Oakes worked to place final cover and grade over the waste relocation area. Oakes also graded sections of the borrow area on landfill roadways by grading, installing geotextile fabric, and placing gravel over the fabric. Oakes also scraped and graded soil cover on the east section of the landfill.

Mr. Corns reviewed the leachate truck log and found that one load was removed on 9 May 2001; two loads were removed on 10 May 2001; one load was removed on 11 May 2001; one load was removed on 12 May 2001; two loads were removed on 14 May 2001; and one load was removed on 15 May 2001.

At 9:40 A.M., the leachate tank gage indicated a leachate level of 6.6 feet. This corresponds to a volume of 18,800 gallons. At 2:40 P.M., the leachate level was at 8.3 feet, corresponding to a volume of 24,239 gallons. The difference of 5,439 gallons in 5 hours indicated a leachate flow rate into the tank of 26,107 gallons/day.

#### 17 May 2001

Representatives of RMT and Oakes were present on site to perform work. Joe Corns of EDI was present to perform construction oversight.

Mr. Corns reviewed the tanker truck logs and found that two loads of leachate were removed late in the day on 16 May 2001; and one load was removed early in the day on 17 May 2001.

Oakes continued final grading in the waste relocation area and began placing topsoil over the borrow area.

#### 31 May 2001

The Prefinal Inspection was conducted at H. O. D. Landfill. Present were Ron Murawski and Mike Joyce of U.S. EPA, Greg Ratliff of the Illinois EPA, Omprakash Patel of WESTON, Joe Corns of EDI, Ara Molitor of Clark Dietz, Inc., Larry Buechel and Jack Dowden of Waste Management, Inc., and Mark Torresani, Joel Schittone, and Kirk Solberg of RMT. RMT distributed meeting minutes to all attendees subsequent to the meeting.

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Topics covered at the meeting included the purpose of the inspection, the construction completion checklist, the Prefinal Inspection Report, and the Remedial Action Completion Report.

Following the meeting, a walkthrough of the site was conducted. Incomplete items identified included the perimeter fence, the flare area fence, repairs to the silt fence, cutting and capping of unused gas vents, the final cover survey, seeding of the landfill cover, filling and grading of the slope, a possible leachate seep on the south central side of the landfill, continued run-on of the leachate flow-meter, and system telemetry for Waste Management.

RMT responded that most items on the checklist will be completed by 15 June 2001.

#### 17 July 2001

The final inspection was conducted at H. O. D. Landfill. Present were Ron Murawski of U.S. EPA and Omprakash Patel and Steve Ryan of WESTON, Larry Buechel of Waste Management, Inc., and representatives of RMT. The punch list items identified during the prefinal inspection were reviewed during the meeting.

Following the meeting, a walkthrough of the site was conducted. Incomplete items identified during the prefinal inspection were reviewed. Except for seeding of some area and fencing on the north side, the construction was completed.

# **PHOTO-DOCUMENTATION**



9 April 2001 — View of Leachate Load Out Station Looking North



9 April 2001 — View of Flare and Blower Building Looking East



9 April 2001 — View From Blower Building Looking Northwest



19 April 2001 — Flare and Blower Building Looking Southeast

\*Date wrong on photo



10 April 2001 — Oakes Equipment Moving Soil Stockpile



10 April 2001 — Distant View of Flare, Building, and Southwest Section of Landfill



13 April 2001 — Oaks Constructing Berm East of Flare



13 April 2001 — RMT Taking Readings at Well Head (Typical)

\*Date wrong on photo



13 April 2001 — Flare and Blower Building Looking South

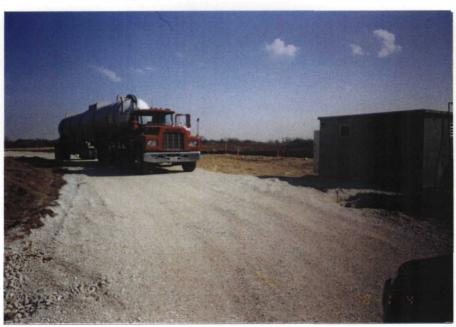


13 April 2001 — Oakes Constructing Beam East of Flare

\*Date wrong on photo



13 April 2001 — RMT Taking Readings at Well Head (Typical)



13 April 2001 — Leachate Tanker at Loadout Pad

\*Date wrong on photo



13 April 2001 — Clay Berm Southeast of Flare



13 April 2001 — Leadate Tanker on Landout Pad

\*Date wrong on photo



19 April 2001 — Flare and Blower Building Looking South



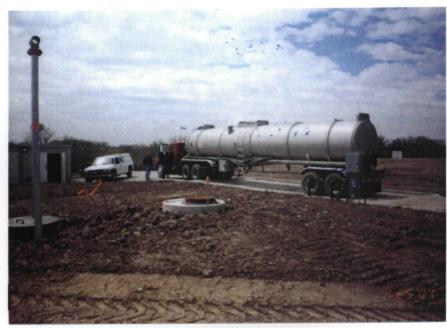
19 April 2001 — Construction of Clay Berm Near Blower BUilding



25 April 2001 — Oakes Equipment Moving Stockpiled Soil



25 April 2001 — Oakes Equipment Placing Stockpiled Soil on West End of Landfill



25 April 2001 — Tanker Truck Removing Leachate from UST



25 April 2001 — Berm Being Constructed East of UST



25 April 2001 — Waste Relocation Area Looking Northeast, Prior to Placement of Topsoil



25 April 2001 — Silt Fence at Northwest Corner of Landfill



9 May 2001 — Oakes Completing Final Grading on Landfill Cover



9 May 2001 — RMT Employee Adjusting Gas Flow at Well



9 May 2001 — View of South End of Landfill Looking East



9 May 2001 — View of South Roadway Looking West



9 May 2001 — Oakes Grading Landfill Topsoil Adjacent to Roadway



9 May 2001 — Uncompleted Section of Roadway on East Side of Landfill



9 May 2001 — Geotextile Fabric Placed on Roadway on North side of Landfill



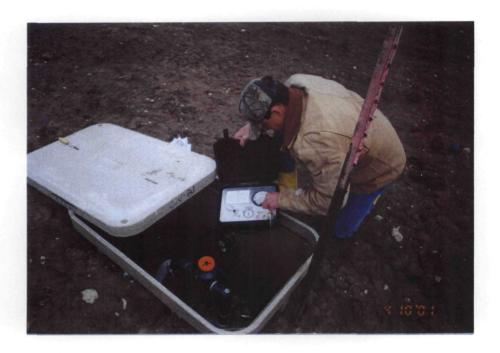
9 May 2001 — Completed Section of Roadway on North Side of Landfill



9 May 2001 — Roadway on North Side of Landfill Prior to Gravel Placement



4 May 2001 — View of Landfill Looking Southeast



10 April 2001 — RMT Employee Measuring Methane Concentration at Well Head (Typical)



10 April 2001 — Leachate Tanker Taking Leachete from Leachate Load Out Station



4 May 2001 — Unfinished Section of Roadway on North Side of Landfill



4 May 2001 — View of Borrow Area Looking North



4 May 2001 — Completed Section of Roadway on South Side of Landfill Looking
East



4 May 2001 — Protective Berm West of Flare



4 May 2001 — Bulldozer Grading Roadway



4 May 2001 — Completed Section of Roadway at Southeast Section of Landfill

# COPIES FROM FIELD LOG BOOK

1420 reported leadiete flow rate to Om 5/4/2001 Joe Coms arriver sixe 1430 Joe Corns leaving 81to Peachal lex 2,6' (2'7.2") 31" 5418.78 32" 3665.50 = 468.124 padway has geoferfile fabric and stone from an trance, haulicad to fank then a long saith side of land fill to patheast corner Daker IN working on leashar tumber was here I land taken out cakes now working en center cross road- grading Review of daily repoAs Awards worked on east born Aw cakes worked on roadway

3/4/2001 Daily Roperts 4/27/01 Als pakes worked on partions Aw cakes placed growthto fabric and grave ( on glued I) tugs on realts readway past of Aplipabed polot right cross vine Went witnessed well standownest at 22903 David Road Aw Onkos worked on rockings 4/28/2007 5/2/2001 AW Dates worked on sordway Ale Onles explad on Randways that need to be out down to final grade RMT oxcavated Capable commercial injected apoxy flare pad

to roadway pop to capable concrete injected aposes into creaks in flare part eachet loadout courleted Cakes, now working on 0940 Kirk asked that the Cons get permission from larry Buechell to review Leachart log and manifests Joe Porns Havelling around Rolph from Prizm 15 supposed According to Kirk , areas remaining to be love - has not that sold to be topsoiled one know area southwest arrived at -120 sk yet sexhon ( wast relocation area) and access road to borrow acar 1000 Joe Corns puring site 6166,6

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4	Shil	Brish	busher up the loor
4/26	365839 372605	37/849 378617	1140 Meeting with Kirk of plower building to come
4/27	380820 387667 394460	386835 393676 400472	frien En was to come to sik today - Kirk has not heard from Rolph
4/28	401583	407592	has not returned to
4/30	417326 424024 430694 137554	42 3334 430034 436714 443572	Oaker places soil to fill
5-1 5-3 5-3 5-4 5-3	445098 452722 461 258	451104 40458729 467340 474160 482378	1220 De Caris retins  1220 De Caris retins  1220 De Caris retins  1230 De Caris retins

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1230 | larchate level 3.2'
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3 hours 20 minutes
200 minutes 5/4/2001 7301,87 1833.75/ 1200 = 9.17 gpm 13,204,8 ga/ Alay 1240 speaking with Kirk at tailer - not heard from Prizm Env. will try to 10 schedule pump repair for next wednesday 1265 9,32

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5/9/2001 ful ales placed topsil son both soles of north 0120 flan 1 302 0/3 Conclude level 5.5' No work due to sain worked an Telomotry 155 in 15027. 55 gastars

0930 See Corns at Rust Leastor

Daily Reports No work due to muldy conditions 5/4/2001 Dakes placed tops on north side of site and cut + fill on

0940 at leadrate los out 5/4/2001 methane flow values at well heads 5/3 468140 5/4 476311 5/5 484550 474160 182378 Bakes 14 now scraping and 490640 grading landfill cover at 492844 499867 Buildings on northeast 499735 525 758 adjacent property are 506637 512664 5/8 520270 514230 being almolished Road compat on south Kirk Sollberg worms Je Cors that flow meter will be with solonard to ent power to flow meter when Road is being constructed by cathing & hilling soit base laying down peotestile fabric, then placing CA-6 stone over fabric and grading pump is short off Kirk stats that flowmeter run on error is a mechanical felectrical problem Joe Coms of north side es land fill

5/3/2001 5/9/2001 papair silt face, which has collapsed in a number of areas. stall meter reading 521967 CHEW is soffing the silt Anus reading 528012 force back up right backark trank level 3.3 1055 leachate tack arrives sik Se Corns at purpout par l'enclate level at 5.8' 5'9.6" 69.6° 10" 15891,23 10" 16178,73 16063.73 39" 7459.55 3'3.6" 40" 7724.28 39.6" 7618.39 gallous 9120 15027,55 95 minures 1036, 18/96 140-1200 Toe Coins eats land 15710/day

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5/9/2001 5/9/2001 1205 Jae Coms on north side Joe Coms at blower The operating at 1479°F
297 ets Oakes is putting down geotosie fabric and placing gravel over fabric leadark level in tank: 3.6 1205-1235 Eaker broke for 43 8529.17 kinds no activity Cakes working on east end of north 1300 At last side of land hit Cakes is putting down geotextile fibric art northeast corner of land hill geotexte fabric un rollas on road then grave!
durped by dump tuch
and graded capes also, grading cover of budill over waste reconsolidation a rear after grading - Enkes runs
solling compartor over

5/9/2001 5/9/2001 Conversation with On Pak 1310 and pump oute - Joe will send on e-mail between took lovels 12.68 gpm and pure out shown 18,244.56 on flow deter Have experenting 1522°F 295 cfs 1315 Disgessing road building with cakes and Rut of land fill white 435 For Coms leaves site 1410 gravel is delivered and Cakes pets down geokxhle flric 1425 leadrate lovel at 40 9901.46 gallons at 1125 was 7618.39

5/16/2001 0930 Toe Corns arrive site Rolph from Prizm not yet on-site Rolph from Paris arrives tank love ( set 6.6" 79" 18744.06 0940 Rdph at BW-29 GW-29 leas 1004 water - not purping Rolph will some bad to it & lenove well lead ones now at GN-25 bud crimp on discharge line

5/16/2001 Kolph places clamp under crimp en leachate discharge line -still leaking - Rolph tiglitens convertion with Kirk Dakes placing topsoil on waste Relaction area 1005 at GW-20 Rolph lavers input arripessure pump then runs ok 100 moved to puny & GW. 22 pump wasn't pumping at all

5/16/2001 5/10/2001 comploted around pump not pump ing -will have to be pulled regarring box fatting at aw 16 1025 et AWF 5 Olomp repaired at and 10 leachale discharge line no longer leaking bad air fitting leaks air Rolph will soud a no said Rolph repairs litting at was leaking of bab filing 120 Rolph repairs chang at Rolph out line of Kinsfelled

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5/16/2001 5/16/2001 lerchox feel at 7.2 1120 Joe reviewing daily reports 5/8/01 No work - muddy 20689 61 3/9/01 Cakes put down gravel and graded 20962,34 road on north side Rolph a Sett, Craig Diemor Phumbing & excaveting loaded debris from removing well head over 2 Dagot Road Midland fince repaired silt Rece Oakes doing final goading 5/10/01 Oakes placing gravel and compacting along north red and glacing topsdil at waste relocation area final grading a 150 new confer of Imali! Diemer loading debris from 2 Depot road demolition Rolph alredy removed pumps · Kohis I son abundanced sophic at GW found set to tank at 22903 Dagot Load Shallow

5/16/2001 Rolph will shorker and raise pump BW 27 Wednesday of rext week. Rolph places penne down tole in osw-29 - it now premps 521967 528012 535590 529561 I'm that had down 536640 542659 544246 550905 55231 558476 568139 S01937 569097 575184 532953 57681 L 21771.02

5/16/2001 1230 flare/blower 5/16 /2001 Dakes continues to place and grade topsoil in waste relocation area 1537 °F Oakes also picking of bouldes on land her surface Joe goes to Kunch 1250 Joe Porus returns 1300 Pakes grading in borrow areas
and placing topsoil over
west place for area 18,800,26 435 falore: 1506 F 295 cfs 1310-1330 and all with On & Ran - discuss backert, fuce, pumps 140 leadest level at 8.3 8'3.6" 100" 24337 54 246,05 24239.12 14239.12-18800.26 = 5438.86

5/16/2001 5438.86/5 hours: 5/17/2001 1087.77 gal/hour 26106.53 gal/day Joe Counk avrises site discuss transducer in transducer height in with Kirk - states translucer level in tanducer level in tank off bottom - level gage not accurate at leachast loadout pro 584835 591155 591521 597558 598514 594531 eachage level in tank - 6.8° Alle running - 1475 = 1 299 efs 19305,68 83 84 92 82 62 82 62 64 92

3/17/2007
1015 Oakes is placing topsoil on the borrows Datos is doing final
grading at uses to
reconsolidation since
and will be putting
lopsoil on borrow Toe Coms loaves site

5/31/2001 Joe Cons arriver ste at flare - flar operating Aw Oakes on site 0710 Joe Corns driving around land fill Aw Cakes is grading south slope of Indfill Capes crew is also placing top soil on borrow roma on site - Sriver says they will clear a few trees

from the parimeter 10730 Kirk from RMT acrives at trailer

5/38/2001 5/31/2001 Daily Construction Reports An Construction Reports 5/11/01 No earth work Oakes finished placing Braded site at 2 Dept Road and grading topsoil In wisk relocation mas -began placing topsoil 5/14/01 Cake played & gracied In berrow area topsuil al west refore hon Dakes placed topsoil in borrow anoce T+ R Tree Lemons UISIKed Rent Placed bontonite wound rain at 1/30 shul down PUC Misers for action horal operations Scott & Kirk clared blower 5/16/01 Oakes placed a graded unlet scheen. topsoil at was to who ann - Oaker set up 19/01 Cakes slaced & graded grade stakes around soil in borrow area flore and consisson and laid out road building to borrow area at north end of site Prism repaired pumps

Daily Constaction Reports 5/31/2001 5/21/01 Oakos placed +
graded topsoil in
borrow and until deles excavated trench corrugated HDPE culverts site conditions helted at north access road Work. to borrow area Prizm reset purper GW-22 to proper depth - also knowd RE Allen on site to start survey work -center lines of access 1 pump to be replaced roads, final quide shots, blag/flare locations 5/22/01 Oakes graded area wet six & rains prevented around blower building I flare to a subgracke any regrading work elevation to solve for 6" A6 to be placed geokxple fabric placed and gravel placed on Dored graded NE corner to allow for drainage

Daily Construction Populs 5/3/2001 5/29/01 Dakes workent to

regrade south slope

and continued grading

borrow area

5/30/01 Oaks graded outh

slope and borrow area set value vaults on the values Onkes placed 1" stone at Repained cracks in well vault Diemer Plumbing begins demy of house on Depot street Reports

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5/31/2001

5/31/2001

OBTO TAR THE Clearing Cuthing trees at south middle area of land hold 0930 pre hues inspection 11:20 7.6 2 22,000 gal